

## CLIMATOLOGICAL DATA FOR APRIL, 1912.

## DISTRICT No. 11, CALIFORNIA.

Prof. ALEXANDER G. MCADIE, District Editor.

## GENERAL SUMMARY.

April, 1912, was the coldest April since 1897, i. e., the coldest since the tabulation of such records began. It was nearly  $3^{\circ}$  colder than April, 1911, which in its turn was a very cold month. In the matter of rainfall, April, 1912, broke all previous records for that month. Rains were frequent and well distributed and the totals in various portions of the State were far in excess of the amounts recorded in other wet Aprils. April, 1911, was a wet month, and yet the total rainfall for the State was approximately only 65 per cent of the rainfall of the present month. This rainfall was of the greatest benefit to the State. A long dry period during the winter had caused considerable apprehension, and while this was relieved by the generous rainfall of March, it was fully recognized that good rains were necessary during April to assure bountiful harvests and to permit mining and power work. At the present time the prospect is excellent for crops and while the water supply is not abundant and the season will be an early and open one in the mountains, stockmen, irrigationists, and power engineers are in no sense disheartened.

The month began with pressure distribution favorable for southerly winds, cloudy weather, and showers; but it was not until the 4th that rain fell. A short period of fair weather was followed by the development of a general depression over the eastern and southern portions of the State, extending eastward over the Great Basin. From the 8th to the 12th, inclusive, rains were general. Then followed a period of fair weather, except that in the mountains, especially the northern portion of the Sierra, showers were of frequent occurrence. During the last decade there were no features of special importance except frosts of April 22 and the showery condition which quickly followed. Some slight damage was done to garden truck and low tree fruits by the frost, apricots, peaches, and prunes being in a tender condition about this time. It is said that in one valley, the Santa Clara, more than 80,000 smudge pots or orchard heaters were used for the first time and that the results were satisfactory. The temperature, however, did not fall much below freezing and the cold period was of short duration.

No unusually high winds occurred during the month. There was less fog but not quite as much sunshine as usual, owing to high clouds.

## TEMPERATURE.

The temperature for the State was  $5^{\circ}$  below the normal, making the month, as above stated, the coldest on record. The following table gives the mean temperature for Cal-

ifornia for each April during the time such records have been kept:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	$^{\circ}F.$	$^{\circ}F.$		$^{\circ}F.$	$^{\circ}F.$
1897.....	60.6	+3.6	1905.....	57.2	+0.2
1898.....	60.9	+3.9	1906.....	56.3	-0.7
1899.....	58.1	+1.1	1907.....	58.2	+1.2
1900.....	53.9	-3.1	1908.....	58.4	+1.4
1901.....	55.8	-1.2	1909.....	57.6	+0.6
1902.....	56.2	-0.8	1910.....	59.8	+2.8
1903.....	54.8	-2.2	1911.....	54.2	-2.8
1904.....	57.2	+0.2	1912.....	51.9	-5.1

The highest temperature recorded was  $92^{\circ}$ , on the 30th, at Heber. This was  $7^{\circ}$  lower than the highest temperature recorded during April, 1911. The lowest temperature was  $-14^{\circ}$ , at Tamarack, on the 22d. This was  $12^{\circ}$  lower than the lowest temperature of April, 1911.

The highest mean temperature was  $69^{\circ}$ , at Bagdad, and the lowest was  $25.8^{\circ}$ , at Tamarack.

## PRECIPITATION.

The average precipitation for California for April with departures from the normal is as follows:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	Inches.		Inches.	Inches.
1897.....	0.51	-1.28	1905.....	1.18	-0.61
1898.....	0.41	-1.38	1906.....	1.68	-0.11
1899.....	0.60	-1.19	1907.....	1.11	-0.68
1900.....	2.14	+0.35	1908.....	0.67	-1.12
1901.....	2.16	+0.37	1909.....	0.12	-1.67
1902.....	1.88	+0.09	1910.....	0.62	-1.17
1903.....	1.28	-0.51	1911.....	1.93	+0.14
1904.....	2.18	+0.39	1912.....	3.07	+1.28

The greatest monthly precipitation was 13.86 inches, at Upper Mattole, or 5.21 inches more than the heaviest monthly amount reported during April, 1911. At 2 stations there was no rain during the month.

## SNOWFALL IN THE MOUNTAINS.

April was not a month of heavy snowfall, although there were frequent snowstorms. There was very little packed snow, owing to the marked deficiency during January and February; and while more than a normal amount fell during March, it was in general loosely packed. At the close of the month the snow cover while greater than that of 1910 was far less than that of 1911.

## SPECIAL COMPARATIVE REPORTS.

*Summit.*—The following table shows depth of snow on ground at Summit on several dates in April for a number of years:

	Apr. 1.	Apr. 15.	Apr. 30.
	Inches.	Inches.	Inches.
1907.....	240	165	117
1908.....	50	31	23
1909.....	188	158	129
1910.....	65	32	12
1911.....	135	146	96
1912.....	50	30	29

## SUNSHINE.

The following table gives the total hours of sunshine and percentages of possible:

Stations.	Hours.	Per cent of possible.	Stations.	Hours.	Per cent of possible.
Eureka.....	141	35	Sacramento.....	222	56
Fresno.....	304	77	San Diego.....	238	61
Los Angeles.....	250	64	San Francisco.....	192	49
Mount Tamalpais.....	206	52	San Jose.....	240	61
Red Bluff.....	189	48	San Luis Obispo.....	214	55

There was less sunshine during the current April than during April last year.

## NOTES ON THE RIVERS OF THE SACRAMENTO AND LOWER SAN JOAQUIN WATERSHEDS DURING APRIL, 1912.

By N. R. TAYLOR, Local Forecaster.

*Sacramento watershed.*—For the fifth consecutive month the rivers of the Sacramento drainage basin have been exceptionally low. Previous low-water records for the month were broken at all points, except at Red Bluff on the Sacramento, where the river averaged 0.4 of a foot above the low water of 1908. At Colusa, Knights Landing, and Sacramento City the Sacramento averaged from 7 to nearly 10 feet below the stages usually maintained during the month in question.

In the Feather, Yuba, and American watersheds all streams averaged the lowest on record for April.

The rainfall throughout the Sacramento Valley was deficient generally, and the amount which fell had little effect on stream flow. The greatest rise reported was at Colusa, where the river rose slightly over 3 feet during the 24 hours ending at 7 a. m. of the 12th.

*Lower San Joaquin watershed.*—While less than the normal amount of rain fell in this watershed, the shortage was not so marked in the higher regions as in the floor of the valley. The effect of rainfall on stream flow, however, was barely apparent in any of the rivers, all of which averaged lower than for any corresponding month of which there is a record. The San Joaquin itself, from Lathrop to the mouth of the Calaveras, averaged over 10 feet below the mean stage of the past 13 years, and was over 6 feet below the previous low-water stage for April.

## NOTES ON THE RIVERS OF THE UPPER SAN JOAQUIN WATERSHED.

By W. E. BONNETT, Local Forecaster.

The stages of the streams of the Upper San Joaquin watershed continued to be extremely low during April. They were much lower than the lowest previous stages for this month in the six years of record. At Merced

Falls, on the Merced River, the mean stage was 0.9 foot, as compared with a mean stage of 1.7 feet for the last six Aprils. Following some good rains on the 9th, 10th, and 11th the river at this point rose to 1.5 feet, the maximum stage of the month.

Similar conditions obtained on the San Joaquin. The mean stage at Friant was but 0.3 foot and at Firebaugh —0.4, as compared with six-year averages of 2.4 feet and 5.2 feet for these stations, respectively. The highest stage at Friant occurred on the 11th and at Firebaugh on the 13th and 14th.

At Piedra, on the Kings River, and at Three Rivers, on the Kaweah, the highest stages for the month also occurred on the 11th, but they were only a few tenths of a foot higher than the low stages which immediately preceded that date. The stages in these streams were low and remarkably uniform throughout the month.

From the irrigators' viewpoint the streams have been disappointingly low. Several canals, particularly those served from the Kings River, which by judicial decision are not entitled to water until the stream has reached a certain stage, so far this season have been without water because the stream has not risen above the required stage.

## NEW HEATER AND VAPORIZER FOR FROST PROTECTION.

(Advance copy printed in Pacific Rural Press, Apr. 27, 1912.)

By Prof. A. G. MCADIE, U. S. Weather Bureau.

Various types of heaters and smudgers were described in Bulletin No. 29, United States Weather Bureau, entitled, "Frost Fighting," issued March 13, 1900.

The first heater used, so far as our knowledge goes, was the wire basket coal burner of Copley, at Riverside, Cal., in the winter of 1895-96. The first oil burner was used in California in the winter of 1900-1901. Since then many burners and orchard heaters have been devised, and there are now on the market 17 or more types of orchard heaters, most of them oil burners.

There has naturally been competition among the makers, and claims of superiority are published and widely distributed in fruit-growing States. It may be said that nearly all of the heaters are serviceable and that there is no longer any doubt concerning their protective value. The problem now is one of higher efficiency, together with cleanliness of method and ease of handling. There are two ways in which improvements can be made, one by securing a more uniform and more complete combustion, and the other (closely connected) by decreasing the amount of soot. Crude oil is unquestionably the cheapest fuel where combustion methods are used, although we believe covers are most economical in the long run. Tests by Lewis and Brown, in 1910, and by O'Gara, in 1911, show that crude oil is best per unit of cost; but the method is not a clean one, and if the orchards are located in a thickly settled community, as is the case with the orange groves of California, vigorous objection is made to the soot. Moreover, greater uniformity in the rate of combustion is desirable. With many of the present types of orchard heaters, especially the open-pail variety, the rate of combustion decreases with the time of burning. Soot arresters do not help, but rather make matters worse; and there is constant complaint that after burning a few hours the amount of heat given off is much diminished, and this at a time when heat is most needed.

With a view to meeting the above objections, two new methods are being tried at the local office of the Weather

TABLE 1.—Climatological data for April, 1912. District No. 11, California.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Oregon.</b>																				
Klamath Agency.	Klamath.	4,169	4	45.6	- 5.1	76	8	24	13	41	0.71	+ 0.58	0.40	7.0	3	17	5	8	w. se.	Edson C. Watson.
Klamath Falls.	do.	4,100	23	42.3	- 5.1	73	10	21	5	41	1.49	+ 0.58	0.43	4.0	8	8	2	20	.....	W. H. Heileman.
Lakeview.	do.	4,825	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ralph E. Koozer.	
Merrill.	Klamath.	4,070	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Agnes Ritchison.	
Yonna.	do.	4,146	5	38.7	.....	70	7	12	5	47	1.86	.....	0.55	0	8	3	20	7	s.	Jacob Ruecke.
<b>California.</b>																			.....	
Alameda.	Alameda.	19	2	40.9	.....	72	6	17	5	54	2.71	.....	0.46	18.0	12	6	14	10	sw.	Chas. E. Sears.
Alturas.	Modoc.	4,460	8	40.9	.....	72	6	17	5	54	2.71	.....	0.46	18.0	12	6	14	10	sw.	Prof. C. B. Towle.
Angiola.	Tulare.	208	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.	
Antioch **.	Contra Costa.	46	33	55.8	- 3.9	78	13	35	23	.....	0.52	- 0.30	0.28	0	5	18	0	12	.....	Southern Pacific Co.
Aptos.	Santa Cruz.	102	27	54.8	- 0.1	67	25	40	12	3.23	+ 1.16	1.81	0	6	11	6	13	nw.	Do.	
Arrowhead Springs.	San Bernardino.	2,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. E. A. Crokat.	
Auburn.	Placer.	1,360	41	49.8	- 6.7	71	9	30	20	35	1.06	- 1.36	0.64	0	6	14	7	9	.....	Southern Pacific Co.
Avalon.	Los Angeles.	30	2	55.6	.....	66	24	45	11	17	1.56	.....	0.49	0	7	24	4	2	w.	T. S. Manning.
Azusa.	do.	540	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. P. Griffith.	
Bagdad.	San Bernardino.	784	9	69.0	- 4.6	88	30	42	12	27	0.00	.....	0.00	0	0	.....	.....	.....	Santa Fe Co.	
Bakersfield.	Kern.	404	23	58.9	- 4.6	78	7	42	20	27	1.16	+ 0.84	0.43	0	6	19	5	6	w.	E. L. White.
Barstow.	San Bernardino.	2,105	9	59.4	.....	90	7	33	21	46	0.21	+ 0.14	0.21	0	1	19	3	6	sw.	State University.
Berkeley.	Alameda.	317	25	52.5	- 2.2	65	17	39	12	20	1.47	- 0.11	0.48	0	7	11	3	6	s.	Southern Pacific Co.
Biggs **.	Butte.	98	13	56.4	- 3.0	74	17	43	12	23	2.13	+ 1.14	0.70	0	8	15	4	11	.....	Paul E. Lodge.
Bishop.	Inyo.	4,450	17	48.2	- 5.3	78	2+	17	22	56	0.82	+ 0.33	0.33	0	3	.....	.....	.....	Do.	
Bishop Creek.	do.	8,500	2	33.3	.....	56	30	9	13	29	3.70	.....	1.20	37.0	7	17	0	13	.....	Victor Hope.
Blocksburg.	Humboldt.	1,700	6	46.0	.....	69	1	28	19	37	8.37	.....	1.25	1.5	18	3	5	22	.....	Southern Pacific Co.
Blue Canyon.	Placer.	4,695	13	41.6	- 5.3	62	1+	21	12	28	7.06	+ 3.52	1.42	33.0	12	11	7	12	s.	D. H. Carey.
Blythe.	Riverside.	268	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. J. Haun.	
Branscomb.	Mendocino.	2,000	12	45.4	.....	70	1+	27	22	38	8.14	+ 4.01	2.60	9.0	12	11	8	11	n.	M. D. Witter.
Brawley.	Imperial.	-105	3	65.6	.....	89	28	38	12	42	T.	.....	T.	0	0	.....	.....	.....	Mrs. M. D. Chambers.	
Burney.	Shasta.	3,300	2	43.4	.....	75	8	22	17	48	2.86	.....	1.46	2.0	7	4	15	11	sw.	Carl Stevens.
Cahuilla.	Riverside.	3,600	1	44.8	.....	73	23	14	26	47	4.05	.....	2.26	22.5	8	12	12	6	sw.	J. E. Peck.
Calexico.	Imperial.	0	7	66.4	.....	90	29	44	13	40	0.00	.....	0.00	0	0	28	0	2	nw.	Southern Pacific Co.
Caliente **.	Kern.	1,290	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.	
Calistoga.	Napa.	363	40	45.3	- 12.5	75	30	30	15	.....	2.14	- 0.44	0.80	0	7	11	0	19	w.	F. M. Righter.
Campbell.	Santa Clara.	217	15	50.7	- 4.2	70	6+	31	22	35	1.72	+ 0.76	0.42	0	8	12	7	11	nw.	Cal. Gas & Elec. Co.
Camptonville (near).	Cedarville.	3,500	5	48.1	.....	74	1	28	13	35	7.57	.....	2.24	11.0	13	3	12	15	s.	T. H. Johnstone.
Chico.	Modoc.	4,675	18	42.1	- 4.1	69	6+	24	19	40	1.10	+ 0.27	0.19	7.0	10	8	22	0	sw.	G. H. Stephenson.
China Flat.	Butte.	189	43	54.2	- 7.4	76	8+	34	25	40	2.14	+ 0.47	1.17	0	6	10	5	15	s.	O. I. Westerburg.
Chino **.	Humboldt.	600	3	53.4	.....	82	1	33	1	49	6.75	.....	2.04	0	13	4	11	15	.....	Southern Pacific Co.
Cisco **.	San Bernardino.	714	20	55.7	- 5.1	79	23	39	13	.....	2.33	+ 2.05	1.32	0	6	10	0	20	e.	Do.
Claremont.	Placer.	5,939	41	41.4	+ 4.1	62	7	25	19	36	6.00	+ 2.16	2.00	60.0	13	17	2	11	.....	Prof. F. P. Brackett.
Cloverdale.	Los Angeles.	1,200	20	50.0	- 3.8	80	23	33	12	34	2.79	+ 2.06	2.06	0	9	7	14	9	.....	Union Oil Co.
Coalinga.	Sonoma.	340	10	49.4	- 8.4	75	15	49	24	33	3.34	+ 1.53	1.15	0	10	20	1	9	s.	C. D. McComish.
Colfax.	Fresno.	55.2	.....	8.5	.....	79	6	35	20	37	1.71	.....	1.00	0	6	20	7	3	w.	Southern Pacific Co.
Colusa.	Colusa.	60	9	55.3	.....	75	7+	36	12	32	1.04	- 0.09	0.75	0	5	14	14	2	.....	Do.
Corning **.	Tehama.	277	26	59.6	- 0.7	74	8	46	1+	26	2.06	+ 0.70	0.63	0	7	8	15	7	s.	Southern Pacific Co.
Cuyamaca.	San Diego.	4,677	13	42.6	- 3.0	64	23	26	11	25	4.38	+ 2.08	1.91	22.0	6	10	7	13	e.	L. L. Macquarie.
Davisville.	Yolo.	51	40	53.8	- 7.0	78	1	30	19	44	1.37	+ 0.15	0.76	0	5	10	16	4	sw.	S. H. Brackett.
Deer Creek.	Nevada.	3,700	5	41.4	.....	63	1	25	12	35	8.11	.....	3.05	20.0	15	11	14	s.	Cal. Gas & Elec. Co.	
Del Monte.	Monterey.	25	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Warner.	
Delta.	Shasta.	1,138	27	54.7	- 2.4	82	2+	34	10	47	7.42	+ 1.95	3.50	2.5	8	17	2	11	n.	Southern Pacific Co.
Denair.	Stanislaus.	126	13	51.0	- 7.4	80	29	31	30	43	1.02	+ 0.03	1.00	0	2	20	0	10	.....	Santa Fe Co.
De Sabla.	Butte.	2,500	3	46.2	.....	68	6	31	19	30	5.32	.....	1.80	10.0	9	5	18	7	sw.	Cal. Gas & Elec. Co.
Dobbins (near).	Yuba.	1,650	8	53.4	.....	72	8	36	13	28	3.13	.....	1.14	0	9	8	15	7	s.	Do.
Downieville.	Sierra.	3,150	1	45.8	.....	71	5	26	20	41	7.03	.....	2.42	7.0	13	3	17	10	ne.	J. T. Mason.
Dudley.	Kings.	595	.....	58.2	.....	80	7	37	20	36	1.15	.....	0.85	0	5	16	10	4	ne.	Union Oil Co.
Dunlap (near).	Mariposa.	3,000	3	44.3	.....	67	2	22	11	36	4.05	.....	1.75	3.0	10	6	12	12	nw.	W. H. Dudley.
Dunnigan **.	Yolo.	65	35	61.9	- 0.5	73	5+	45	11	35	4.03	.....	1.03	0	13	8	13	9	.....	U. S. Forest Service.
Dunsmuir **.	Siskiyou.	2,285	23	47.1	- 6.3	78	8	34	11	45	1.45	+ 0.11	0.49	0	7	16	3	11	n.	Southern Pacific Co.
Durham.	Butte.	160	17	53.8	- 4.2	75	6	35	22	35	2.60	+ 0.87	1.82	1.5	11	9	0	21	s.	Do.
El Cajon.	San Diego.	482	13	56.1	- 3.6	79	23	39	17	42	1.42	+ 1.79	0.95	0	7	23	5	2	w.	R. W. Durham.
Electra.	Amador.	725	8	54.3	.....	76	6	36	22	32	3.45	.....	1.23	0	8	17	4	9	.....	H. H. Kessler.
Elsinore.	Riverside.	1,234	17	56.1	- 4.3	85	23	33	13	44	1.80	+ 1.32	0.87	0	4	16	8	6	w.	Cal. Gas & Elec. Co.
Emigrant Gap.	Placer.	5,230	38	38.5	- 4.0	61	1	21	12	24	5.55	+ 1.10	1.90	36.0	8	5	10	15	.....	Southern Pacific Co.
Escondido.	San Diego.	657	18	56.2	- 2.2	76	2+	38	21	35	3.11	+ 2.26	1.42	0	5	0	26	4	w.	A. R. Moon.
Eureka.	Humboldt.	64	26	48.4	- 1.1	61	22	38	19	23	5.92	+ 1.64	1.87	0	18	1	15	14	se.	U. S. Weather Bureau.
Farmington **.	San Joaquin.	111	33	56.6	- 2.5	77	7	40	12	27	1.26	- 0.32	0.65	0	6	9	17	4	se.	H. D. Jerrett.
Folsom.	Sacramento.	252	40	54.2	- 6.6															

TABLE 1.—Climatological data for April, 1912. District No. 11—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.						
<i>California—Continued.</i>																					
Independence.	Inyo.	3,907	16	67.6	-4.9	90	23†	39	12	37	0.36	+ 0.28	0.30	0	2	23	4	3	nw.		
Indio.	Riverside.	-20	34	67.6	-4.9	90	23†	39	12	37	0.36	+ 0.28	0.30	22.8	8	3	9	18	U. S. Weather Bureau. F. N. Johnson.		
Inskip.	Butte.	4,975	5	38.9	66	1	24	12†	22	7	7.33	-	3.53	0	8	13	0	17	Cal. Gas & Elec. Co. Southern Pacific Co.		
Ione **.	Amador.	287	34	58.1	-0.6	76	8†	41	1	27.1	+ 0.69	0.69	0	0	11	13	1	sw.			
Jamestown.	Tuolumne.	1,471	9	50.7	-	73	10	31	1†	40	4.26	-	1.60	0	13	9	17	Sierra Railway Co. O. J. Eggleston.			
Kennett.	Shasta.	730	-	54.2	-	82	8	34	11†	37	9.20	-	1.94	0	13	9	17	Miss M. E. Parsons. Southern Pacific Co.			
Kentfield.	Marin.	65	24	53.3	-	75	5	36	13	36	3.37	+ 0.91	0.43	0	7	13	9	s.			
King City.	Monterey.	333	25	61.6	+ 5.1	83	19†	38	11	35	2.78	+ 2.27	1.56	0	5	15	0	15	O. J. Todd. Southern Pacific Co.		
Lake Eleanor.	Tuolumne.	4,700	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	s.			
La Porte.	Plumas.	5,000	18	38.4	-3.8	62	1	20	13	32	7.88	+ 2.56	2.77	53.3	14	5	18	7	Chas. W. Hendel. Santa Fe Co.		
Le Grand.	Merced.	255	12	64.2	-3.2	76	6	36	14	36	2.19	+ 1.38	0.84	0	8	19	1	10	G. W. Sandige. The Director.		
Lemon Cove.	Tulare.	600	17	58.6	-3.8	85	2	31	21	52	3.11	+ 1.54	0.75	0	7	9	16	w.			
Lick Observatory.	Santa Clara.	4,209	23	40.0	-6.4	57	23	26	12†	24	2.70	-0.11	0.80	0	9	6	7	nw.			
Livermore.	Alameda.	485	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E. G. Still. Ezra Fiske.			
Lodi.	San Joaquin.	45	30	55.9	-2.4	76	28	36	22	34	2.55	+ 1.46	1.10	0	7	9	12	9	G. F. Marsh. A. G. Evans.		
Lone Pine.	Inyo.	2,728	7	51.3	-	80	30	25	12†	42	0.55	-	0.35	0	1	22	6	2	U. S. Weather Bureau. Southern Pacific Co.		
Long Valley.	Lassen.	4,400	3	44.4	-	69	6	21	19	40	1.38	-	0.91	1.0	1	5	2	23	sw.		
Los Angeles.	Los Angeles.	293	35	56.4	-1.2	76	23	44	11	24	1.66	+ 0.30	0.70	0	7	10	11	9	ne.		
Los Banos **.	Merced.	121	25	56.6	-6.0	72	25	40	12	1.87	+ 1.31	0.84	0	7	13	0	17	Southwick. F. H. McCullagh.			
Los Gatos.	Santa Clara.	800	25	52.5	-3.8	73	23	35	22	32	3.66	+ 1.63	1.25	0	6	14	3	13	F. F. Spencer. Union Oil Co.		
McCloud.	Siskiyou.	3,410	2	44.2	-	77	9	18	19	46	6.10	-	2.14	12.0	10	10	15	5	Do.		
Macdoel.	do.	4,258	5	37.7	-	87	1	19	5†	44	1.95	-	0.50	0	5	4	17	9	Butte Valley Land Co. J. H. Williams.		
Madeline.	Lassen.	5,270	3	37.4	-	66	6	17	19	46	1.71	-	0.30	19.0	12	4	5	21	Cal. Gas & Elec. Co. Butte Co. R. R. Co.		
Magalia.	Butte.	2,321	8	48.4	-	76	8	38	18	36	7.69	-	2.00	0	11	5	9	w.			
Mammoth Tank.	Imperial.	257	34	66.6	-8.8	90	7	41	13	36	0.15	+ 0.06	0.15	0	1	19	8	3	Southwick. John C. Knecht.		
Maricopa.	Kern.	640	1	57.4	-	78	6†	38	12	31	0.80	-	0.39	0	6	14	8	8	Union Oil Co. Southern Pacific Co.		
Marysville.	Yuba.	67	41	55.4	-6.6	76	8	33	9	33	1.85	+ 0.34	0.63	0	7	14	0	16	Southern Pacific Co. F. A. Palmer.		
Mecia.	Riverside.	-185	6	68.2	-	90	23	40	12	40	T.	-	0	0	20	10	0	nw.			
Menlo Park **.	San Mateo.	64	34	55.1	-2.0	68	23	38	12†	1	1.45	+ 0.13	0.55	0	8	11	12	7	Santa Fe Co. Union Oil Co.		
Merced.	do.	173	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Do.			
Middlewater.	Kern.	1	57.5	-	-	78	6†	40	11†	34	1.86	-	0.90	0	6	12	7	11	n.		
Mill Creek No. 1.	Amador.	5	45.4	-	-	66	6	30	19†	30	4.65	-	1.26	2.0	12	6	12	12	s.		
Milton (near).	Calaveras.	660	21	53.8	-4.8	73	6	37	13†	30	1.89	+ 0.25	0.80	0	9	13	12	5	nw.		
Modesto **.	Stanislaus.	90	40	59.2	-3.0	75	6†	45	11	1.00	+ 0.12	0.75	0	2	14	0	16	Do.			
Mojave.	Kern.	2,751	35	54.8	-4.9	71	30	32	4	16	0.50	+ 0.29	0.50	T.	1	26	2	2	C. E. Prindle. Herbert Lathrop.		
Mokelumne Hill.	Calaveras.	1,550	19	50.4	-4.3	70	6	31	11	29	2.78	-0.01	0.91	0	9	9	5	nw.			
Mono Ranch.	Ventura.	3,210	20	47.1	-	70	23	27	13	36	2.89	-	1.49	3.5	4	18	7	5	I. E. Deboy. Southern Pacific Co.		
Montague.	Siskiyou.	2,450	24	45.5	-7.8	74	1†	21	5	47	1.46	+ 0.89	0.86	T.	10	14	11	11	John C. Knecht. U. S. Weather Bureau.		
Monterey **.	Monterey.	15	47	54.4	-1.4	64	8	46	15	31	3.41	+ 2.03	1.78	0	7	5	0	25	Chabot Observatory. B. L. Johnson.		
Monterio.	Kern.	4,500	13	43.1	-10.4	62	5	28	13	20	1.31	-	0.50	0	8	10	4	16	U. S. Forest Service. U. S. Weather Bureau.		
Mount Tamalpais.	Marin.	2,375	13	44.4	-5.1	59	15	32	11	19	2.15	+ 0.15	0.61	0	12	11	7	12	Alex. Hull. W. H. Martin.		
Napa City.	Napa.	20	35	50.0	-5.1	70	5†	32	12†	34	1.72	-	0.19	0.70	0	4	9	9	sw.		
Napa (S. H.).	do.	60	34	51.4	-5.4	66	5	35	12†	28	1.47	-0.44	0.56	0	5	9	12	9	Do.		
Needles.	San Bernardino.	470	20	68.9	-2.8	89	29	45	1	30	0.10	+ 0.02	0.10	0	1	27	0	3	S. W. Bailey. S. W. Marsh.		
Nellie.	do.	5,350	3	47.0	-	66	25	28	21	36	7.90	-	42.0	4	-	-	-	-	Western Pacific Co. Southern Pacific Co.		
Nevada City.	San Diego.	2,580	20	46.0	-4.5	71	1†	25	20	41	5.51	+ 1.01	1.47	5.0	10	5	20	5	se.		
Newhall **.	Nevada.	1,200	35	52.6	-6.3	80	2†	40	12	1.88	+ 0.84	0.84	0	5	18	4	8	E. S. Wangenheim. J. R. McIntosh.			
Newman.	Stanislaus.	91	23	63.8	+ 1.7	80	5†	48	12	22	0.99	+ 0.29	0.39	0	7	8	0	22	U. S. Forest Service. U. S. Weather Bureau.		
North Bloomfield.	Nevada.	3,214	15	50.4	-0.9	67	5	32	27	24	5.74	+ 0.65	1.70	0	6	14	11	5	A. Baring-Gould. John Hyslop.		
North Fork.	Madera.	3,000	8	48.3	-	78	14	26	20	46	5.43	-	1.62	0	12	8	18	U. S. Reclamation Service. F. T. Hale.			
Oakdale **.	Stanislaus.	156	18	56.2	-1.4	78	6	38	20	20	1.12	-	0.02	0.52	0	3	12	8	sw.		
Oak Grove.	San Diego.	2,751	2	47.84	-	73	2†	24	13	43	2.76	-	1.73	11.0	6	18	8	4	Chabot Observatory. B. L. Johnson.		
Oakland.	Alameda.	36	34	56.6	-0.8	70	23	41	12†	24	1.07	-	0.49	0.31	0	6	11	10	w.		
Oceanside.	San Diego.	60	2	58.4	-	70	23	45	12	21	2.36	-	0.59	0.59	0	8	12	8	Do.		
Ojai Valley.	Ventura.	900	6	53.6	-	78	23	31	12	38	1.91	-	0.70	0	4	15	12	3	W. H. Duncan. Dr. F. W. Sawyer.		
Orland.	Glen.	254	30	54.9	-8.5	78	8	35	11	35	1.91	+ 0.67	0.58	0	10	13	7	sw.			
Orleans.	Humboldt.	520	9	58.0	-	88	2	36	22	50	6.68	-	1.76	0	19	5	0	25	Do.		
Oroville (near).	Butte.	250	28	56.0	-3.5	78	1	38	11†	39	2.36	+ 0.38	0.95	0	7	6	11	13	E. D. Fairchild. Western Pacific Co.		
Palermo.	do.	213	21	56.9	-1.8	79	6	37	17†	38	1.40	-	0.14	0.75	0	5	20	5	Southern Pacific Co.		
Palm Springs **.	Riverside.	534	23	63.0	-0.4	84	14†	40	14	0.12	+ 0.08	0.05	0	3	20	3	7	E. D. Sorver. Dr. F. W. Sawyer.			
Pasadena.	Los Angeles.	827	22	54.6	-5.5	80	23	36	13	36	2.62	+ 2.34	1.08	0	7	26	1	3	Dr. F. W. Sawyer. E. H. Parnell.		
Paso Robles.	San Luis Obispo.	800	25	51.8	+ 6.0	77	2	28	13	44	2.89	+ 2.24	1.07	0	6	23	4	3	Do.		
Peachland.	do.	1,875	23	49.2	-3.0	70	22	30	23†	40	4.15	-	0.10	1.02	0	7	9	8	Do.		
Point Lobos.	San Francisco.	250	19	50.0	-4.2	63	14	44	9†	15	1.44	+ 0.61	0.49	0	8	19	1	10	Leslie McAliff. U. S. Weather Bureau.		
Point Reyes.	Marin.	490	20	49.4	-1.7	58	3	42	11	13	0.71	-	0.63	0	11	12	5	13	Do		

TABLE 1.—*Climatological data for April, 1912. District No. 11—Continued.*

Stations.	Counties.	Elevation, feet	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.							
<i>California—Continued.</i>																						
Selma **.	Fresno.	311	26	58.5	-3.8	80	24	42	11	... 1.84	+ 1.15	0.76	0	8	18	0	12	w.	Do.	Southern Pacific Co.		
Seven Oaks.	San Bernardino.	5,000	2	43.2	... 11.9	68	24	20	12	40	2.23	1.83	12.7	6	24	1	5	nw.	M. Lewis.	Do.		
Shasta.	Shasta.	1,048	16	49.2	-11.9	72	7†	27	11	41	5.27	+ 1.29	0	9	17	7	6	nw.	Dr. T. J. Edgecomb.	U. S. Weather Bureau.		
Sierra Madre.	Los Angeles.	1,400	15	52.7	-6.7	80	23	37	12	37	4.61	+ 3.20	1.41	0	9	15	2	13	se.	Mrs. A. E. Gregory.	C. D. Johnson.	
Sierraville.	Sierra.	5,000	2	34.5	... 1.1	69	1	5	1	64	2.31	1.50	T.	4	6	5	19	sw.	Southern Pacific Co.	Do.		
Sisson.	Siskiyou.	3,555	23	41.2	-6.0	66	9	25	4†	33	4.13	+ 1.67	1.95	12.0	14	3	18	9	s.	Do.	Chas. P. Jones.	
Soledad **.	Monterey.	188	38	55.0	... 1.2	70	23	31	20	32	3.68	+ 1.07	1.66	0	7	14	10	6	nw.	Do.	U. S. Weather Bureau.	
Sonora.	Tuolumne.	1,825	24	50.0	... 1.2	59	14	43	11	9	1.24	0.46	0	9	14	8	8	nw.	Do.	Do.		
Southeast Farallon.	San Francisco.	30	9	50.6	... 1.2	68	8	23	20	36	4.52	1.30	24.0	7	13	0	17	sw.	Do.	Do.		
Springville.	Tulare.	4,000	5	44.0	... 1.2	60	23	25	12	24	6.51	3.11	24.0	7	13	10	7	sw.	A. D. Frantz.	California Gas & Elec. Co.		
Squirrel Inn.	San Bernardino.	5,280	2	39.8	... 1.2	70	17	30	1†	36	4.76	2.21	0	6	18	0	12	ne.	Butte Co. R. R. Co.	Do.		
Stanwood.	Butte.	2,140	8	48.0	... 1.2	68	9	32	12†	25	5.10	2.00	12.5	7	8	8	14	se.	State Hospital.	Do.		
Stirling City.	do.	3,525	8	48.4	... 1.2	70	17	42	22	41	1.67	+ 0.38	0.64	0	6	19	0	11	nw.	Santa Fe Co.	Do.	
Stockton (S. H.)	San Joaquin.	23	41	55.0	-3.9	73	5†	38	12†	31	1.54	+ 0.43	0.79	0	7	14	12	4	nw.	Southern Pacific Co.	Do.	
Storey.	Madera.	296	12	52.2	-5.8	74	6†	28	4†	39	1.81	+ 1.07	1.00	0	6	19	0	11	sw.	Do.	Do.	
Suisun **.	Solano.	20	32	53.0	-6.9	70	17	42	22	31	1.67	+ 0.38	0.62	0	6	18	4	8	sw.	Southern Pacific Co.	Do.	
Summerdale.	Lake.	1,350	24	54.1	... 1.2	72	2†	35	19	32	1.53	0.62	4	7	17	8	5	w.	J. T. La Bree.	Do.		
Summit.	Marietta.	5,270	16	39	... 1.2	49	25	20	1†	26	3.50	- 1.10	1.50	35.0	8	9	4	17	sw.	Mrs. J. E. Lowry.	Do.	
Susanville.	Placer.	7,017	39	33.2	-2.3	49	25	20	1†	26	3.50	- 1.10	1.50	35.0	8	9	4	17	sw.	Southern Pacific Co.	Do.	
Lassen.	Alpine.	4,175	23	43.8	-3.6	68	8	22	20	38	1.85	+ 0.79	1.01	1.0	9	8	20	2	sw.	James Branham.	Do.	
Tamarack.	Kern.	8,000	6	25.8	... 1.2	52	1	-14	22	58	7.00	1.50	80.0	13	3	18	9	sw.	California Gas & Elec. Co.	Do.		
Tehachapi **.	Tehama.	3,964	35	49.8	-0.4	70	7	33	10	... 1.83	+ 0.58	0.60	9.0	7	18	3	9	s.	Southern Pacific Co.	Do.		
Tehama **.	Tehama.	220	41	54.2	-6.5	74	2	38	15	... 1.39	+ 0.12	0.58	0	3	18	0	17	s.	S. E. Bailey.	Do.		
Tejon Rancho.	Kern.	1,500	10	48.4	... 1.2	64	2†	29	20	24	1.57	0.72	0	7	14	0	17	s.	E. D. Barton.	Do.		
Three Rivers.	Tulare.	870	2	54.5	... 1.2	78	6	32	20†	37	3.63	0.76	0	10	5	19	6	sw.	Southern Pacific Co.	Do.		
Towle.	Placer.	3,704	26	43.0	-8.1	64	1†	26	11	31	7.63	+ 4.36	2.00	13.0	10	6	11	13	sw.	Do.	Do.	
Tracy **.	San Joaquin.	64	32	57.9	-3.0	68	1†	46	12	... 1.24	+ 0.38	0.30	0	7	6	15	9	nw.	Dr. Geo. McCowen.	Do.		
Ukiah.	Mendocino.	620	19	52.0	-2.7	78	5	30	12	46	3.81	+ 1.36	1.39	0	11	16	0	14	nw.	Do.	Do.	
Upper Lake.	Lake.	1,350	27	49.4	-5.4	76	5	29	12†	45	2.87	+ 1.17	1.07	0	8	9	5	16	nw.	C. M. Hammond.	Do.	
Vacaville.	Solano.	175	24	54.2	-4.6	74	8	30	22	36	1.83	- 0.14	0.52	0	7	7	20	3	sw.	G. O. Coburn.	Do.	
Valley Springs **.	Calaveras.	673	23	55.0	-5.9	74	16	41	12†	... 1.58	- 0.31	0.43	0	9	11	9	10	nw.	Southern Pacific Co.	Do.		
Visalia.	Tulare.	334	24	55.0	... 1.2	70	23	28	12	40	3.19	2.07	11.0	8	19	8	3	sw.	Santa Fe Co.	Do.		
Warner Springs.	San Diego.	3,165	4	49.7	... 1.2	80	23	28	12	40	3.19	2.07	11.0	8	19	8	3	sw.	Mrs. F. S. Sandford.	Do.		
Wasco.	Kern.	336	12	55.6	-4.0	77	6†	35	20†	41	1.01	+ 0.50	0.45	0	4	11	7	12	sw.	Santa Fe Co.	Do.	
Watsonville.	Santa Cruz.	23	16	48.2	-9.3	70	14†	22	12†	43	2.78	+ 1.71	1.05	0	8	18	4	w.	Spreckles Sugar Co.	Do.		
Weaverville.	Trinity.	2,162	47.8	45.8	... 1.2	77	1	27	5†	47	4.79	1.66	T.	12	9	4	17	w.	U. S. Forest Service.	Do.		
Witchpec.	Humboldt.	1,700	2	45.8	... 1.2	70	1	26	19	34	8.92	2.78	0.5	17	11	9	10	s.	M. E. Lathrop.	Do.		
Westley **.	Stanislaus.	90	23	62.2	-1.8	76	17†	44	12	... 1.22	+ 0.55	0.42	0	6	17	0	13	sw.	Southern Pacific Co.	Do.		
Wheatland.	Yuba.	84	25	54.4	-4.0	72	8	37	20	30	2.53	+ 1.13	0.90	0	7	8	7	15	se.	William Lombard.	Do.	
Willows.	Glenn.	136	33	55.5	-4.8	79	1	35	12†	36	1.86	+ 0.66	0.87	0	7	13	13	4	n.	E. C. Mills.	Do.	
Yosemite.	Marietta.	3,945	8	44.9	... 1.2	74	1†	21	12†	50	3.32	1.00	21.0	11	5	11	14	s.	J. P. Kelley.	Do.		

\* b. \*, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.

\*\* Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 11, California.*

TABLE 2.—*Daily precipitation for April, 1912. District No. 11—Continued.*

TABLE 2.—*Daily precipitation for March, 1912. District No. 11—Continued.*

TABLE 2.—*Daily precipitation for April, 1912. District No. 11—Continued.*

Stations.	Watershed.	Day of month.																												Total.		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
<i>California—Contd.</i>																																
Towle.....	Sacramento.....																															7.63
Tracy.....	San Joaquin.....	.08																													1.24	
Tulare.....	do.....	.05	.16		T.																										1.60	
Tustin (near).....	Coast.....	.11	.04																												1.82	
Ukiah.....	do.....																														3.81	
Upper Lake.....	Sacramento.....																														2.87	
Upper Mattole.....	Coast.....																														13.86	
Vacaville.....	Sacramento.....																														1.83	
Valley Springs.....	San Joaquin.....																														1.58	
Visalia.....	do.....																															
Warner Springs.....	Coast.....																														3.19	
Wasco.....	San Joaquin.....				T.																										1.01	
Watsonville.....	Coast.....																														2.78	
Weeverville.....	do.....																														4.79	
Weitchpec.....	Klamath.....																														8.92	
West Branch.....	Sacramento.....																														5.50	
Westley.....	San Joaquin.....																														1.22	
West Point.....	do.....																														1.20	
West Saticoy.....	Coast.....																														2.53	
Wheatland.....	Sacramento.....																															
Willows.....	do.....																														1.86	
Yosemite.....	San Joaquin.....																														3.32	

\* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for April, 1912. District No. 11, California.

Date.	Burns, Oreg.	California.																									
		Alturas.		Barstow.		Branscomb.		Brawley.		Colusa.		Eureka.		Fresno.		Independ- ence.		Los Angeles.		Mount Tamalpais.		Nevada City.		Porter- ville.		Red Bluff.	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.	64	26	70	20	83	48	70	32	.....	69	40	51	46	76	48	.....	64	48	55	49	71	30	.....	71	43		
2.	68	24	66	19	81	46	64	34	.....	68	40	54	45	74	43	.....	65	46	52	38	71	30	.....	66	44		
3.	66	28	57	29	81	46	65	33	.....	67	40	55	48	71	43	.....	65	48	48	39	64	37	.....	61	46		
4.	70	26	55	32	76	48	66	32	80	50	67	43	49	43	70	50	.....	63	51	55	41	61	33	.....	66	43	
5.	68	30	61	17	74	46	62	28	73	55	74	42	53	38	67	45	.....	62	53	59	41	70	30	.....	75	45	
6.	68	20	72	18	85	46	61	30	81	48	74	42	55	43	77	51	.....	68	51	56	38	69	32	.....	72	42	
7.	69	34	65	38	90	45	52	37	85	49	75	46	51	44	74	45	.....	64	51	43	38	70	36	.....	59	44	
8.	72	36	71	29	76	42	70	37	84	55	75	45	55	42	65	49	.....	57	46	54	39	70	32	.....	76	44	
9.	56	32	71	24	80	45	64	35	73	54	.....	49	46	55	46	.....	56	46	53	37	60	36	.....	63	46		
10.	50	24	60	30	68	43	66	37	73	48	73	42	52	43	58	46	.....	56	47	39	33	41	31	.....	54	42	
11.	56	34	45	19	60	42	41	31	64	50	56	42	46	42	58	42	.....	50	44	44	32	42	30	.....	52	42	
12.	68	30	43	27	60	39	51	28	66	38	59	36	50	40	60	43	.....	59	44	46	34	43	28	.....	58	37	
13.	64	29	47	26	68	36	56	30	70	45	60	40	56	41	63	37	.....	59	45	46	35	54	30	.....	56	41	
14.	60	27	51	25	67	39	58	34	76	48	67	47	57	45	69	46	.....	65	49	56	39	63	30	.....	68	47	
15.	54	30	59	22	80	42	60	35	82	53	71	43	55	40	73	49	.....	66	48	59	46	67	30	.....	72	46	
16.	52	32	56	31	78	42	63	36	82	50	71	47	54	44	74	48	.....	67	52	56	43	67	34	.....	72	52	
17.	42	22	54	30	75	45	61	37	83	55	71	47	52	47	72	46	.....	65	52	56	44	66	35	.....	73	49	
18.	46	28	51	26	69	42	55	31	86	56	69	43	50	41	65	47	.....	69	51	47	35	65	32	.....	62	45	
19.	45	32	45	20	70	40	54	31	77	56	65	40	48	38	62	42	.....	65	51	45	34	55	26	.....	61	40	
20.	45	25	44	18	66	34	55	33	78	49	64	39	51	42	62	42	.....	64	52	47	37	58	25	.....	66	45	
21.	44	26	46	26	75	33	51	30	83	48	65	41	51	40	68	38	.....	67	50	48	36	57	28	.....	62	44	
22.	49	28	60	19	80	45	55	27	88	46	64	40	61	38	72	40	.....	68	47	55	36	63	26	.....	60	40	
23.	52	29	58	29	89	43	56	33	87	62	68	47	59	49	77	42	.....	76	52	47	40	66	36	.....	64	52	
24.	54	27	48	32	75	45	49	39	81	55	69	45	54	48	69	48	.....	64	51	48	39	52	37	.....	65	45	
25.	50	33	52	30	80	46	51	30	82	53	70	40	54	44	71	44	.....	67	51	54	39	60	27	.....	66	41	
26.	56	22	52	30	73	47	55	37	82	53	65	46	55	47	61	49	.....	60	49	51	38	58	33	.....	67	47	
27.	63	26	62	25	80	45	53	34	86	48	72	45	53	48	70	47	.....	67	47	52	39	64	30	.....	67	45	
28.	60	28	53	38	86	47	54	36	89	49	65	41	56	46	73	49	.....	64	49	44	39	58	40	.....	58	48	
29.	62	24	49	31	78	45	54	37	85	49	67	49	53	48	66	52	.....	63	50	45	40	47	38	.....	63	48	
30.	56	26	52	29	82	48	53	38	87	57	66	44	56	48	70	44	.....	67	53	47	40	58	32	.....	59	47	
Mns.	57.6	27.9	55.5	26.3	75.5	43.3	57.4	33.4	80.1	51.1	67.8	42.8*	53.1	43.7	68.1	45.4	.....	63.7	49.1	50.2	38.6	60.3	31.8	.....	64.5	44.7	

Date.	California.																									
	Redlands.		Sacra- mento.		San Diego.		San Francisco.		San Jose.		San Luis Obispo.		Santa Barbara.		Santa Rosa.		Sisson.		Stockton.		Summit.		Susanville.		Yosemite.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	70	47	68	44	61	46	55	46	65	45	62	48	64	44	60	44	65	35	71	43	46	20	64	30	74	24
2.	75	42	63	42	61	52	56	45	57	44	56	43	62	47	60	34	59	39	63	40	42	30	64	32	72	22
3.	70	43	63	44	61	54	60	48	64	40	62	36	60	44	63	40	52	26	64	44	40	34	62	35	72	28
4.	63	46	67	47	60	53	58	48	66	47	60	46	62	48	67	67	55	25	68	47	57	37	58	37	65	28
5.	56	48	72	43	61	53	61	46	68	44	64	46	63	49	71	33	59	29	73	42	42	34	58	29	65	28
6.	70	48	68	46	64	51	57	48	69	38	66	43	66	45	61	35	60	39	73	43	47	30	67	29	74	24
7.	75	42	62	44	58	54	57	48	66	40	61	48	63	50	56	42	48	26	66	42	35	67	39	72	24	
8.	65	49	72	46	58	48	61	48	59	42	58	42	54	45	67	42	65	35	69	45	48	32	68	35	72	25
9.	54	40	58	46	58	46	56	48	56	47	54	45	58	47	62	44	66	33	62	52	38	30	64	37	62	34
10.	57	43	52	43	59	50	51	44	54	43	52	45	54	46	53	44	42	30	60	45	34	24	64	33	59	29
11.	48	40	52	42	54	46	53	44	52	40	52	41	53	42	54	38	36	29	61	40	28	24	49	31	49	24
12.	53	36	59	36	57	47	54	44	58	38	55	34	63	44	60	29	42	29	60	38	40	22	48	27	52	21
13.	58	37	60	40	59	45	59	45	61	38	56	34	56	40	59	36	40	30	63	40	48	22	49	27	54	21
14.	68	44	67	47	60	47	66	49	67	45	65	46	63	45	69	40	52	30	67	42	47	23	54			